

JOERGER ENTERPRISES, INC. _____

MODEL S-12

12 CHANNEL, 100MHZ SCALER



FEATURES:

- 12 CHANNELS, 24 BITS, PACKAGED IN A SINGLE WIDTH CAMAC MODULE
- LOW PER CHANNEL COST
- 100MHZ COUNTING RATES
- STANDARD IC'S, NO SOLE SOURCE COMPONENTS
- FAST CLEAR AND INHIBIT
- INTERRUPT CAPABILITY
- TEST MODE
- CASCADE CHANNELS FOR 48 BIT CAPACITY

The Joerger Enterprises, Inc. Model S-12 is a 12 channel, 100MHZ scaler packaged in a single width CAMAC module. The module uses standard IC's which eliminates the stocking of special hybrids and reduces the possibility of module obsolescence. The inputs are D.C. coupled and can accept signals as narrow as 5nsec at rates of 100MHZ. High speed CLEAR and INHIBIT are provided from the front panel and in addition, the module can be gated and reset from the dataway. A LAM structure is provided that, if enabled, will indicate an impending overflow of any channel. An interrupt flip-flop is triggered when a channel reaches a half full condition. A test function is also available that will inject signals into all the channels simultaneously. Testing can be performed in the presence of input signals by inhibiting the modules inputs. For applications requiring a capacity of greater than 24 bits the channels can be cascaded to provide 48 bit capacity. In this mode the overflow flip-flop would still be set when half the capacity has been used, in this case when bit 48 is first set.

SPECIFICATIONS

SIGNAL INPUTS

Pulse Repetition Rate	DC to 100MHZ
Sensitivity	-600mv
Input Impedance	50 ohms <u>+5%</u> DC coupled
Pulse Width	5nsec minimum
Protection	<u>+5</u> volt transients

CLEAR AND INHIBIT INPUTS

Sensitivity	-500mv
Impedance	50 ohms <u>+5%</u> DC coupled

CAMAC COMMANDS

<i>N·F0·Ai</i>	<i>Reads data from channel Ai (i=0-11) onto read lines 1-24, generates Q and X response.</i>
<i>N·F2·Ai</i>	<i>Reads data from channel Ai onto read lines and resets all scaler channels with All·S2.</i>
<i>N·F8·A(0-11)</i>	<i>Tests Look at Me flip-flop, Q=1 if set. Independent of LAM disable.</i>
<i>N·F9·A(0-11)</i>	<i>Clears all channels at S2.</i>
<i>N·F24·A(0-11)</i>	<i>Disables LAM response on L line.</i>
<i>N·F25·A(0-11)</i>	<i>Increments all scalars.</i>
<i>N·F26·A(0-11)</i>	<i>Enables LAM response.</i>
<i>C·S2</i>	<i>Resets all channels and overflow flip-flop.</i>
<i>Z·S2 and Power Up</i>	<i>Resets all channels, overflow flip-flop, and disables LAM response.</i>
<i>I</i>	<i>Inhibits all scalars</i>
<i>L</i>	<i>An interrupt is generated if any scaler has reached half scale and the module is enabled. L is disabled when module is addressed on its N line.</i>
<i>X</i>	<i>An X response is generated for all valid commands.</i>
<i>Q</i>	<i>A Q is generated in response to F0, F2, and F8 if the modules interrupt flip-flop has been set.</i>

POWER REQUIREMENTS

+6V, 8 Watts

TEMPERATURE RANGE

0°C to 50°C

SIZE

Single width CAMAC module

CONNECTOR

LEMO RA00250 or equivalent.

JET1083